

IN THE CLAIMS:

- 1.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;  
forming a first layer comprising titanium on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer comprising titanium on the second layer; and  
forming a pixel electrode comprising a conductive oxide film on the third layer.
- 2.(Original) A method of manufacturing a display device according to claim 1 wherein the semiconductor region comprises crystalline silicon.
- 3.(Original) A method of manufacturing a display device according to claim 1 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.
- 4.(Original) A method of manufacturing a display device according to claim 1 wherein the first layer comprises titanium nitride.
- 5.(Original) A method of manufacturing a display device according to claim 1 wherein the second layer comprises aluminum containing 1% silicon.
- 6.(Original) A method of manufacturing a display device according to claim 1 wherein the third layer comprises titanium nitride.
- 7.(Original) A method of manufacturing a display device according to claim 1 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

8.(Original) A method of manufacturing a display device according to claim 1 wherein the gate electrode is formed over the semiconductor region.

9.(Original) A method of manufacturing a display device according to claim 1 wherein the display device is an active matrix type liquid crystal display device.

10.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region;

forming a second layer comprising aluminum on the first layer;

forming a third layer comprising titanium on the second layer;

forming a conductive oxide film on the third layer; and

patterning the conductive oxide film so as to form a pixel electrode.

11.(Original) A method of manufacturing a display device according to claim 10 wherein the semiconductor region comprises crystalline silicon.

12.(Original) A method of manufacturing a display device according to claim 10 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

13.(Original) A method of manufacturing a display device according to claim 10 wherein the first layer comprises titanium nitride.

14.(Original) A method of manufacturing a display device according to claim 10 wherein the second layer comprises aluminum containing 1% silicon.

15.(Original) A method of manufacturing a display device according to claim 10 wherein the third layer comprises titanium nitride.

16.(Original) A method of manufacturing a display device according to claim 10 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

17.(Original) A method of manufacturing a display device according to claim 10 wherein the gate electrode is formed over the semiconductor region.

18.(Original) A method of manufacturing a display device according to claim 10 wherein the display device is an active matrix type liquid crystal display device.

19.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer comprising titanium on the second layer;  
patterning the first to third layers so as to form an electrode; and  
forming a pixel electrode comprising a conductive oxide film on the third layer of the electrode.

20.(Original) A method of manufacturing a display device according to claim 19 wherein the semiconductor region comprises crystalline silicon.

21.(Original) A method of manufacturing a display device according to claim 19 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

22.(Original) A method of manufacturing a display device according to claim 19 wherein the first layer comprises titanium nitride.

23.(Original) A method of manufacturing a display device according to claim 19 wherein the second layer comprises aluminum containing 1% silicon.

24.(Original) A method of manufacturing a display device according to claim 19 wherein the third layer comprises titanium nitride.

25.(Original) A method of manufacturing a display device according to claim 19 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

26.(Original) A method of manufacturing a display device according to claim 19 wherein the gate electrode is formed over the semiconductor region.

27.(Original) A method of manufacturing a display device according to claim 19 wherein the display device is an active matrix type liquid crystal display device.

28.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region;

forming a second layer comprising aluminum on the first layer;

forming a third layer comprising titanium on the second layer;

patterning the first to third layers so as to form an electrode;

forming a conductive oxide film on the third layer of the electrode; and

patterning the conductive oxide film so as to form a pixel electrode.

29.(Original) A method of manufacturing a display device according to claim 28 wherein the semiconductor region comprises crystalline silicon.

30.(Original) A method of manufacturing a display device according to claim 28 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

31.(Original) A method of manufacturing a display device according to claim 28 wherein the first layer comprises titanium nitride.

32.(Original) A method of manufacturing a display device according to claim 28 wherein the second layer comprises aluminum containing 1% silicon.

33.(Original) A method of manufacturing a display device according to claim 28 wherein the third layer comprises titanium nitride.

34.(Original) A method of manufacturing a display device according to claim 28 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

35.(Original) A method of manufacturing a display device according to claim 28 wherein the gate electrode is formed over the semiconductor region.

36.(Original) A method of manufacturing a display device according to claim 28 wherein the display device is an active matrix type liquid crystal display device.

37.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region, wherein the first layer does not contain nitrogen;

forming a second layer comprising aluminum on the first layer;

forming a third layer comprising titanium on the second layer; and

forming a pixel electrode comprising a conductive oxide film on the third layer.

38.(Original) A method of manufacturing a display device according to claim 37 wherein the semiconductor region comprises crystalline silicon.

39.(Original) A method of manufacturing a display device according to claim 37 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

40.(Original) A method of manufacturing a display device according to claim 37 wherein the second layer comprises aluminum containing 1% silicon.

41.(Original) A method of manufacturing a display device according to claim 37 wherein the third layer comprises titanium nitride.

42.(Original) A method of manufacturing a display device according to claim 37 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

43.(Original) A method of manufacturing a display device according to claim 37 wherein the gate electrode is formed over the semiconductor region.

44.(Original) A method of manufacturing a display device according to claim 37 wherein the display device is an active matrix type liquid crystal display device.

45.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region, wherein the first layer does not contain nitrogen;

forming a second layer comprising aluminum on the first layer;

forming a third layer comprising titanium on the second layer;

forming a conductive oxide film on the third layer; and

patterning the conductive oxide film so as to form a pixel electrode.

46.(Original) A method of manufacturing a display device according to claim 45 wherein the semiconductor region comprises crystalline silicon.

47.(Original) A method of manufacturing a display device according to claim 45 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

48.(Original) A method of manufacturing a display device according to claim 45 wherein the second layer comprises aluminum containing 1% silicon.

49.(Original) A method of manufacturing a display device according to claim 45 wherein the third layer comprises titanium nitride.

50.(Original) A method of manufacturing a display device according to claim 45 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

51.(Original) A method of manufacturing a display device according to claim 45 wherein the gate electrode is formed over the semiconductor region.

52.(Original) A method of manufacturing a display device according to claim 45 wherein the display device is an active matrix type liquid crystal display device.

53.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region, wherein a portion of the first layer in contact with the semiconductor region comprises titanium silicide;

forming a second layer comprising aluminum on the first layer;

forming a third layer comprising titanium on the second layer; and

forming a pixel electrode comprising a conductive oxide film on the third layer.

54.(Original) A method of manufacturing a display device according to claim 53 wherein the semiconductor region comprises crystalline silicon.

55.(Original) A method of manufacturing a display device according to claim 53 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

56.(Original) A method of manufacturing a display device according to claim 53 wherein the first layer comprises titanium nitride.

57.(Original) A method of manufacturing a display device according to claim 53 wherein the second layer comprises aluminum containing 1% silicon.

58.(Original) A method of manufacturing a display device according to claim 53 wherein the third layer comprises titanium nitride.



59.(Original) A method of manufacturing a display device according to claim 53 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

60.(Original) A method of manufacturing a display device according to claim 53 wherein the gate electrode is formed over the semiconductor region.

61.(Original) A method of manufacturing a display device according to claim 53 wherein the display device is an active matrix type liquid crystal display device.

62.(Original) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer comprising titanium on the semiconductor region, wherein a portion of the first layer in contact with the semiconductor region comprises titanium silicide;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer comprising titanium on the second layer;  
forming a conductive oxide film on the third layer; and  
patterning the conductive oxide film so as to form a pixel electrode.

63.(Original) A method of manufacturing a display device according to claim 62 wherein the semiconductor region comprises crystalline silicon.

64.(Original) A method of manufacturing a display device according to claim 62 wherein the conductive oxide film comprises one selected from the group consisting of indium tin oxide, zinc oxide, and nickel oxide.

65.(Original) A method of manufacturing a display device according to claim 62 wherein the first layer comprises titanium nitride.

66.(Original) A method of manufacturing a display device according to claim 62 wherein the second layer comprises aluminum containing 1% silicon.

67.(Original) A method of manufacturing a display device according to claim 62 wherein the third layer comprises titanium nitride.

68.(Original) A method of manufacturing a display device according to claim 62 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

69.(Original) A method of manufacturing a display device according to claim 62 wherein the gate electrode is formed over the semiconductor region.

70.(Original) A method of manufacturing a display device according to claim 62 wherein the display device is an active matrix type liquid crystal display device.

71.(Currently Amended) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer; and

forming a pixel electrode comprising ~~a conductive oxide film~~ zinc oxide over the second layer.

72.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the semiconductor region comprises crystalline silicon.

73.(Canceled)

74.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the first layer comprises titanium nitride.

75.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the second layer comprises aluminum containing 1% silicon.

76.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

77.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the gate electrode is formed over the semiconductor region.

78.(Previously Presented) A method of manufacturing a display device according to claim 71 wherein the display device is an active matrix type liquid crystal display device.

79.(Currently Amended) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;

forming a second layer comprising aluminum on the first layer;

forming a conductive oxide film comprising zinc oxide over the second layer; and  
patterning the conductive oxide film comprising zinc oxide so as to form a pixel electrode.

80.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the semiconductor region comprises crystalline silicon.

81.(Canceled)

82.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the first layer comprises titanium nitride.

83.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the second layer comprises aluminum containing 1% silicon.

84.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

85.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the gate electrode is formed over the semiconductor region.

86.(Previously Presented) A method of manufacturing a display device according to claim 79 wherein the display device is an active matrix type liquid crystal display device.

87.(Currently Amended) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
patterning the first and second layers so as to form an electrode; and  
forming a pixel electrode comprising ~~a conductive oxide film~~ zinc oxide over the second layer of the electrode.

88.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the semiconductor region comprises crystalline silicon.

89.(Canceled)

90.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the first layer comprises titanium nitride.

91.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the second layer comprises aluminum containing 1% silicon.

92.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

93.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the gate electrode is formed over the semiconductor region.

94.(Previously Presented) A method of manufacturing a display device according to claim 87 wherein the display device is an active matrix type liquid crystal display device.

95.(Currently Amended) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
patterning the first and second layers so as to form an electrode;  
forming a conductive oxide film comprising zinc oxide over the second layer of the electrode; and

patterning the conductive oxide film comprising zinc oxide so as to form a pixel electrode.

96.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the semiconductor region comprises crystalline silicon.

97.(Canceled)

98.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the first layer comprises titanium nitride.

99.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the second layer comprises aluminum containing 1% silicon.

100.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

101.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the gate electrode is formed over the semiconductor region.

102.(Previously Presented) A method of manufacturing a display device according to claim 95 wherein the display device is an active matrix type liquid crystal display device.

103.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;

forming a second layer comprising aluminum on the first layer;

forming a third layer having a barrier characteristics on the second layer; and

forming a pixel electrode comprising a conductive oxide film on the third layer.

104.(New) A method of manufacturing a display device according to claim 103 wherein the semiconductor region comprises crystalline silicon.

105.(New) A method of manufacturing a display device according to claim 103 wherein the first layer comprises titanium nitride.

106.(New) A method of manufacturing a display device according to claim 103 wherein the second layer comprises aluminum containing 1% silicon.

107.(New) A method of manufacturing a display device according to claim 103 wherein the third layer comprises titanium nitride.

108.(New) A method of manufacturing a display device according to claim 103 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

109.(New) A method of manufacturing a display device according to claim 103 wherein the gate electrode is formed over the semiconductor region.

110.(New) A method of manufacturing a display device according to claim 103 wherein the display device is an active matrix type liquid crystal display device.

111.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;

forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer having a barrier characteristics on the second layer; and  
forming a pixel electrode comprising zinc oxide on the third layer.

112.(New) A method of manufacturing a display device according to claim 111 wherein the semiconductor region comprises crystalline silicon.

113.(New) A method of manufacturing a display device according to claim 111 wherein the first layer comprises titanium nitride.

114.(New) A method of manufacturing a display device according to claim 111 wherein the second layer comprises aluminum containing 1% silicon.

115.(New) A method of manufacturing a display device according to claim 111 wherein the third layer comprises titanium nitride.

116.(New) A method of manufacturing a display device according to claim 111 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

117.(New) A method of manufacturing a display device according to claim 111 wherein the gate electrode is formed over the semiconductor region.

118.(New) A method of manufacturing a display device according to claim 111 wherein the display device is an active matrix type liquid crystal display device.

119.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;  
forming an interlayer insulating film over the semiconductor region and over the gate electrode;  
forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer; and  
forming a pixel electrode comprising a conductive oxide film over the second layer and over the interlayer insulating film.



120.(New) A method of manufacturing a display device according to claim 119 wherein the semiconductor region comprises crystalline silicon.

121.(New) A method of manufacturing a display device according to claim 119 wherein the first layer comprises titanium nitride.

122.(New) A method of manufacturing a display device according to claim 119 wherein the second layer comprises aluminum containing 1% silicon.

123.(New) A method of manufacturing a display device according to claim 119 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

124.(New) A method of manufacturing a display device according to claim 119 wherein the interlayer insulating film comprises silicon oxide.

125.(New) A method of manufacturing a display device according to claim 119 wherein the display device is an active matrix type liquid crystal display device.

126.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;  
forming an interlayer insulating film over the semiconductor region and over the gate electrode;  
forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer; and  
forming a pixel electrode comprising zinc oxide over the second layer and over the interlayer insulating film.

127.(New) A method of manufacturing a display device according to claim 126 wherein the semiconductor region comprises crystalline silicon.

128.(New) A method of manufacturing a display device according to claim 126 wherein the first layer comprises titanium nitride.

129.(New) A method of manufacturing a display device according to claim 126 wherein the second layer comprises aluminum containing 1% silicon.

130.(New) A method of manufacturing a display device according to claim 126 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

131.(New) A method of manufacturing a display device according to claim 126 wherein the interlayer insulating film comprises silicon oxide.

132.(New) A method of manufacturing a display device according to claim 126 wherein the display device is an active matrix type liquid crystal display device.

133.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;  
forming an interlayer insulating film over the semiconductor region and over the gate electrode;  
forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer having a barrier characteristics on the second layer; and  
forming a pixel electrode comprising a conductive oxide film on the third layer and over the interlayer insulating film.

134.(New) A method of manufacturing a display device according to claim 133 wherein the semiconductor region comprises crystalline silicon.

135.(New) A method of manufacturing a display device according to claim 133 wherein the first layer comprises titanium nitride.

136.(New) A method of manufacturing a display device according to claim 133 wherein the second layer comprises aluminum containing 1% silicon.

137.(New) A method of manufacturing a display device according to claim 133 wherein the third layer comprises titanium nitride.

138.(New) A method of manufacturing a display device according to claim 133 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

139.(New) A method of manufacturing a display device according to claim 133 wherein the interlayer insulating film comprises silicon oxide.

140.(New) A method of manufacturing a display device according to claim 133 wherein the display device is an active matrix type liquid crystal display device.

141.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode with a gate insulating film interposed therebetween;  
forming an interlayer insulating film over the semiconductor region and over the gate electrode;  
forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer having a barrier characteristics on the second layer; and

forming a pixel electrode comprising zinc oxide on the third layer and over the interlayer insulating film.

142.(New) A method of manufacturing a display device according to claim 141 wherein the semiconductor region comprises crystalline silicon.

143.(New) A method of manufacturing a display device according to claim 141 wherein the first layer comprises titanium nitride.

144.(New) A method of manufacturing a display device according to claim 141 wherein the second layer comprises aluminum containing 1% silicon.

145.(New) A method of manufacturing a display device according to claim 141 wherein the third layer comprises titanium nitride.

146.(New) A method of manufacturing a display device according to claim 141 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

147.(New) A method of manufacturing a display device according to claim 141 wherein the interlayer insulating film comprises silicon oxide.

148.(New) A method of manufacturing a display device according to claim 141 wherein the display device is an active matrix type liquid crystal display device.

149.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a semiconductor region and a gate electrode over the semiconductor region with a gate insulating film interposed therebetween;  
forming an interlayer insulating film over the semiconductor region and over the gate electrode;

forming a first layer having a barrier characteristics on the semiconductor region;  
forming a second layer comprising aluminum on the first layer;  
forming a third layer having a barrier characteristics on the second layer; and  
forming a pixel electrode comprising a conductive oxide film on the third layer and  
over the interlayer insulating film.

150.(New) A method of manufacturing a display device according to claim 149  
wherein the semiconductor region comprises crystalline silicon.

151.(New) A method of manufacturing a display device according to claim 149  
wherein the first layer comprises titanium nitride.

152.(New) A method of manufacturing a display device according to claim 149  
wherein the second layer comprises aluminum containing 1% silicon.

153.(New) A method of manufacturing a display device according to claim 149  
wherein the third layer comprises titanium nitride.

154.(New) A method of manufacturing a display device according to claim 149  
wherein the gate electrode comprises at least one selected from the group consisting of  
aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

155.(New) A method of manufacturing a display device according to claim 149  
wherein the interlayer insulating film comprises silicon oxide.

156.(New) A method of manufacturing a display device according to claim 149  
wherein the display device is an active matrix type liquid crystal display device.

157.(New) A method of manufacturing a display device comprising:  
forming a thin film transistor over a substrate, the thin film transistor comprising a  
semiconductor region and a gate electrode over the semiconductor region with a gate

insulating film interposed therebetween;

forming an interlayer insulating film over the semiconductor region and over the gate electrode;

forming a first layer having a barrier characteristics on the semiconductor region;

forming a second layer comprising aluminum on the first layer;

forming a third layer having a barrier characteristics on the second layer; and

forming a pixel electrode comprising zinc oxide on the third layer and over the interlayer insulating film.

158.(New) A method of manufacturing a display device according to claim 157 wherein the semiconductor region comprises crystalline silicon.

159.(New) A method of manufacturing a display device according to claim 157 wherein the first layer comprises titanium nitride.

160.(New) A method of manufacturing a display device according to claim 157 wherein the second layer comprises aluminum containing 1% silicon.

161.(New) A method of manufacturing a display device according to claim 157 wherein the third layer comprises titanium nitride.

162.(New) A method of manufacturing a display device according to claim 157 wherein the gate electrode comprises at least one selected from the group consisting of aluminum, silicon, titanium, tantalum, tungsten, and molybdenum.

163.(New) A method of manufacturing a display device according to claim 157 wherein the interlayer insulating film comprises silicon oxide.

164.(New) A method of manufacturing a display device according to claim 157 wherein the display device is an active matrix type liquid crystal display device.